



SEQUENCE LISTING

<110> Lee, Bruce Andrew
Flores, Becky Mar
Valkirs, Gunars Edwin
Biosite Diagnostics, Inc.

<120> Assays for Detection of Bacillus Anthracis

<130> 014907-003310US

<140> US 09/754,947

<141> 2001-01-04

<150> US 60/174,901

<151> 2000-01-06

<160> 5

<170> PatentIn Ver. 2.1

<210> 1

<211> 785

<212> PRT

<213> Bacillus anthracis

<220>

<223> surface array protein (SAP)

<400> 1

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Gly Met Phe Glu Pro Gly Lys Glu Leu Thr Arg Ala Glu Ala Ala Thr
35 40 45

Met Met Ala Gln Ile Leu Asn Leu Pro Ile Asp Lys Asp Ala Lys Pro
50 55 60

Ser Phe Ala Asp Ser Gln Gly Gln Trp Tyr Thr Pro Phe Ile Ala Ala
65 70 75 80

Val Glu Lys Ala Gly Val Ile Lys Gly Thr Gly Asn Gly Phe Glu Pro
85 90 95

Asn Gly Lys Ile Asp Arg Val Ser Met Ala Ser Leu Leu Val Glu Ala
100 105 110

Tyr Lys Leu Asp Thr Lys Val Asn Gly Thr Pro Ala Thr Lys Phe Lys
115 120 125

Asp Leu Glu Thr Leu Asn Trp Gly Lys Glu Lys Ala Asn Ile Leu Val
130 135 140

Glu Leu Gly Ile Ser Val Gly Thr Gly Asp Gln Trp Glu Pro Lys Lys
145 150 155 160

Thr Val Thr Lys Ala Glu Ala Ala Gln Phe Ile Ala Lys Thr Asp Lys
 165 170 175
 Gln Phe Gly Thr Glu Ala Ala Lys Val Glu Ser Ala Lys Ala Val Thr
 180 185 190
 Thr Gln Lys Val Glu Val Lys Phe Ser Lys Ala Val Glu Lys Leu Thr
 195 200 205
 Lys Glu Asp Ile Lys Val Thr Asn Lys Ala Asn Asn Asp Lys Val Leu
 210 215 220
 Val Lys Glu Val Thr Leu Ser Glu Asp Lys Arg Ser Ala Thr Val Glu
 225 230 235 240
 Leu Tyr Ser Asn Leu Ala Ala Lys Gln Thr Tyr Thr Val Asp Val Asn
 245 250 255
 Lys Val Gly Lys Thr Glu Val Ala Val Gly Ser Leu Glu Ala Lys Thr
 260 265 270
 Ile Glu Met Ala Asp Gln Thr Val Val Ala Asp Glu Pro Thr Ala Leu
 275 280 285
 Gln Phe Thr Val Lys Asp Glu Asn Gly Thr Glu Val Val Ser Pro Glu
 290 295 300
 Gly Ile Glu Phe Val Thr Pro Ala Ala Glu Lys Ile Asn Ala Lys Gly
 305 310 315 320
 Glu Ile Thr Leu Ala Lys Gly Thr Ser Thr Thr Val Lys Ala Val Tyr
 325 330 335
 Lys Lys Asp Gly Lys Val Val Ala Glu Ser Lys Glu Val Lys Val Ser
 340 345 350
 Ala Glu Gly Ala Ala Val Ala Ser Ile Ser Asn Trp Thr Val Ala Glu
 355 360 365
 Gln Asn Lys Ala Asp Phe Thr Ser Lys Asp Phe Lys Gln Asn Asn Lys
 370 375 380
 Val Tyr Glu Gly Asp Asn Ala Tyr Val Gln Val Glu Leu Lys Asp Gln
 385 390 395 400
 Phe Asn Ala Val Thr Thr Gly Lys Val Glu Tyr Glu Ser Leu Asn Thr
 405 410 415
 Glu Val Ala Val Val Asp Lys Ala Thr Gly Lys Val Thr Val Leu Ser
 420 425 430
 Ala Gly Lys Ala Pro Val Lys Val Thr Val Lys Asp Ser Lys Gly Lys
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Ala Leu Val Ser His Thr Val Glu Ile Glu Ala Phe Ala Gln Lys Ala
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 Met Lys Asp Ile Lys Leu Glu Lys Thr Asn Val Ala Leu Ser Thr Lys
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Asp Val Thr Asp Leu Lys Val Lys Ala Pro Val Leu Asp Gln Tyr Gly
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 Lys Glu Phe Thr Ala Pro Val Thr Val Lys Val Leu Asp Lys Asp Gly
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 Lys Glu Leu Lys Glu Gln Lys Leu Glu Ala Lys Tyr Val Asn Arg Glu
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 Asp Thr Glu Leu Asp Lys Tyr Val Thr Glu Glu Asn Gln Lys Asn Ala
 580 585 590
 Met Thr Val Ser Val Leu Pro Val Asp Ala Asn Gly Leu Val Leu Lys
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 Gly Ala Glu Ala Ala Glu Leu Lys Val Thr Thr Thr Asn Lys Glu Gly
 610 615 620
 Lys Glu Val Asp Ala Thr Asp Ala Gln Val Thr Val Gln Asn Asn Ser
 625 630 635 640
 Val Ile Thr Val Gly Gln Gly Ala Lys Ala Gly Glu Thr Tyr Lys Val
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 Thr Val Val Leu Asp Gly Lys Leu Ile Thr Thr His Ser Phe Lys Val
 660 665 670
 Val Asp Thr Ala Pro Thr Ala Lys Gly Leu Ala Val Glu Phe Thr Ser
 675 680 685
 Thr Ser Leu Lys Glu Val Ala Pro Asn Ala Asp Leu Lys Ala Ala Leu
 690 695 700
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 Thr Ala Ser Asn Val Glu Phe Val Ser Ala Asp Thr Asn Val Val Ala
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 Glu Asn Gly Thr Val Gly Ala Lys Gly Ala Thr Ser Ile Tyr Val Lys
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 Asn Leu Thr Val Val Lys Asp Gly Lys Glu Gln Lys Val Glu Phe Asp
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 Lys
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 <212> DNA
 <213> *Bacillus anthracis*

<220>
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 cgtgcagaag cagctacaat gatggctcaa atcttaaact taccaatcga taaagatgct 180
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 ccagcaacta aattcaaaga tttagaaaca ttaaactggg gtaaagaaaa agctaactc 420
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 gcagtaacaa ctggaaaagt tgaatatgag tcgttaaaca cagaagttgc tgtagtagat 1260
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 acagatttaa aagtaaaagc tccagtacta gatcaatacg gtaaagagtt tacagctcct 1500
 gtaacagtga aagtacttga taaagatggt aaagaattaa aagaacaaaa attagaagct 1560
 aaatatgtga acagagaatt agttctgaat gcagcaggtc aagaagctgg taattataca 1620
 gttgtattaa ctgcaaaatc tgggtgaaaa gaagcaaaag ctacattagc tctagaatta 1680
 aaagctccag gtgcattctc taaatttgaa gttcgtggtt tagacacaga attagataaa 1740
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 aatggattag tattaaaagg tgcagaagca gctgaactaa aagtaacaac acaaacaaaa 1860
 gaaggtaaag aagtagacgc aactgatgca caagttactg tacaaaataa cagtgtatt 1920
 actgttggtc aaggtgcaaa agctggtgag acttataaag taacagttgt actagatggt 1980
 aaattaatca caactcattc attcaaagtt gttgatacag caccaactgc taaaggatta 2040
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 gcaaaagggt caacatctat ctatgtgaaa aacctgacag ttgtaaaaga tggaaaagag 2280
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 gcaacaaaac atcaccatca ccatcactaa 2370

<210> 3
 <211> 44
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:5' PCR primer

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<223> Description of Artificial Sequence:3' PCR primer

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<212> PRT
<213> Artificial Sequence
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<220>
<223> Description of Artificial Sequence:flexible linker
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<223> Gly at positions 1-97 may be present or absent
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	50					55						60				
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65					70					75						80
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145					150					155						160

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
165 170 175

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
180 185 190

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly
195 200

aa³
